ABSTRACT

A film and a magnetic-recording medium using the film, where the heat shrinkage ratio in the transverse direction of the film subjected to heat treatment under no tension for 30 min. at 180℃ is from 1.0 to 2.5%, and where the film satisfies the following equations (1)-(4) simultaneously, with αMD (x 10^{-6}/℃) and αTD (x 10^{-6}/℃) being coefficient of thermal expansion in the longitudinal and the transverse direction, respectively, and βMD (x 10^{-6}/%RH) andβTD (x 10^{-6}/%RH) being coefficient of hygroscopic expansion in the longitudinal and the transverse direction, respectively. In the film, by controlling the dimensional changes by temperature and humidity within specific ranges, it becomes possible to control the dimensional change and the difference in dimensional changes between the longitudinal and the transverse direction of the film used as a magnetic-recording medium to be extremely small. $-10 \leqq αMD \leqq 10$ (1), $αMD-10 \leqq αTD \leqq αMD-3$ (2), $-10 \leqq βMD \leqq 10$ (3), $βMD-10 \leqq βTD \leqq βMD-3$ (4)